

CLAIMS

1. An optical disk laminating method for laminating an upper disk and a lower disk via adhesive agent, comprising:

a lower disk supplying step of conveying a lower disk above a rotating table by a lower disk supplying unit and placing the lower disk on a plurality of upper and lower disks placing jigs provided along a circumferential direction of a base plate placing portion on the rotating table;

an upper disk supplying step of conveying an upper disk above the rotating table by an upper disk supplying unit and placing the upper disk on the upper and lower disks placing jigs on which the lower disk is placed so as to be spaced from the lower disk;

an adhesive agent applying step for an upper disk of applying adhesive agent on the upper disk from the above in a state that the upper disk and the lower disk have been placed on the upper and lower disks placing jigs;

an upper disk reversing step of reversing the upper disk applied with the adhesive agent;

an adhesive agent applying step for a lower disk of applying adhesive agent to the lower disk after the upper disk reversing step;

a disk stacking step of stacking the upper disk and the lower disk after the adhesive agent applying step for a lower disk;

an adhesive agent spreading step of, after conveying the stacked disks manufactured in the disk stacking step to a rotating stand for spreading adhesive agent by a transfer arm, spreading the adhesive agent applied to the stacked disks on the rotating stand; and

a light ray irradiating step of, after conveying the stacked disks where the adhesive agent has been spread on the rotating stand to a light ray irradiating table by the transfer arm, curing the adhesive agent.

2. An optical disk laminating method for laminating an upper disk and a lower disk via adhesive agent, comprising:

a lower disk supplying step of conveying a lower disk above a rotating table by a lower disk supplying unit and placing the lower disk on a plurality of upper and lower disks placing jigs provided along a circumferential direction of a base plate placing portion on the rotating table;

an upper disk supplying step of conveying an upper disk above the rotating table by an upper disk supplying unit and placing the upper disk on the upper and lower disks placing jigs on which the lower disk is placed so as to be spaced from the lower disk;

an adhesive agent applying step of, after a nozzle is inserted between the upper disk and the lower disk that have been placed on upper and lower disks placing jigs, applying adhesive agent from the nozzle on at least one of a lower face of the upper disk and an upper face of the lower disk;

a disk stacking step of stacking the upper disk and the lower disk after the adhesive agent applying step;

an adhesive agent spreading step of, after conveying the stacked disks manufactured in the disk stacking step to a rotating stand for spreading adhesive agent by a transfer arm, spreading the adhesive agent applied to the stacked disks on the rotating stand; and

a light ray irradiating step of, after conveying the stacked disks where the adhesive agent has been spread on the rotating stand to a light ray irradiating table by the transfer arm, curing the adhesive agent.

3. An optical disk laminating device comprising;

a lower disk supplying unit for placing a lower disk on a rotating table; an upper disk supplying unit for placing an upper disk on the rotating table, which is provided on a downstream step side of the lower disk supplying unit;

an adhesive agent applying unit for an upper disk which is provided on a downstream side of the upper disk supplying unit, for applying adhesive agent on the upper disk from the above;

a reversing unit which is provided on a downstream step

side of the adhesive agent applying unit for an upper disk, for reversing the upper disk applied with the adhesive agent;

an adhesive agent applying unit for a lower disk which is provided on a downstream step side of the reversing unit, for applying adhesive agent to the lower disk from the above;

a suction unit for lifting up the lower disk, while sucking the same, and laminating the lower disk with the upper disk; and

a stacked disks transferring device which has a sucking portion which sucks and holds the upper disk when the upper disk and the lower disk are laminated, conveying the stacked disks from the rotating table to a rotating stand for spreading adhesive agent, and conveying the stacked disks where the adhesive agent has been spread on the rotating stand to a light ray irradiating table, wherein

an upper and lower disks placing jigs on which the upper disk and the lower disk can be placed with a space in a vertical direction are provided around a disk placing portion on the rotating table.

4. An optical disk laminating device comprising;

a lower disk supplying unit for placing a lower disk on a rotating table;

an upper disk supplying unit which is provided on a downstream step side of the lower disk supplying unit, for placing an upper disk on the rotating table;

an adhesive agent applying unit which is provided on a downstream step side of the upper disk supplying unit, for applying adhesive agent from the nozzle inserted between the upper disk and the lower disk on at least one of a lower face of the upper disk and an upper face of the lower disk;

a suction unit for lifting up the lower disk while sucking the same and laminating the lower disk with the upper disk; and

a stacked disks transferring device which has a suction portion for sucking and holding the upper disk when the upper disk and the lower disk are laminated to each other, conveying the stacked disks from the rotating table to a rotating stand

for spreading adhesive agent, and conveying the stacked disks where the adhesive agent has been spread on the rotating stand to a light ray irradiating table, wherein

an upper and lower disks placing jigs on which the upper disk and the lower disk can be placed with a space in a vertical direction are provided around a disk placing portion on the rotating table.

5. An optical disk laminating device according to claim 3 or claim 4, wherein the upper and lower disks placing jig comprises an upper disk placing portion and a lower disk placing portion, and the upper disk placing portion is movable between a position where the lower disk can be inserted up to the lower disk placing portion and a position where the lower disk is placed.